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Remarks

The Examiner's comments and objections and the cited references have been carefully considered by the Applicant.

Claims 18, 29 and 30 are amended and new claims 35-38 are hereby submitted. Claims 24, 32 and 33 are unprejudicially canceled. New claim 35 is based on former claim 29, new claim 36 is based on former claim 30, new claim 37 is based on former claims 18 and 24, new claim 38 is based on former claims 18 and 24.

The specification is amended to include a Brief Description of the Drawings, based on the original specification, page 6, lines 11-12, page 10, line 7 to page 13, line 13.

Claim Rejection - 35 USC § 112

Claims 18-34 are rejected under 35 U.S.C. 112, first paragraph.

It is noted that the Examiner indicates that the invention discloses that the reorganization process can be observed and controlled in rotaxanes and catenanes (item 10 of the Office Action) and that the working example could be extrapolate to any mechanical perturbation (item 12 of the Office Action) .

Claim 18 is limited to a thin film of rotaxanes and catenanes and to a mechanical perturbation and claims 24, 32 and 33 are cancelled.

It is considered that the above rejection under 35 USC § 112, first paragraph is overcome.

Claims 29, 30, 32 and 33 are rejected under 35 U.S.C. 112, second paragraph for containing a broad range or limitation together with a narrow range or limitation. Claims 32 and 33 are cancelled and claims 29 and 30 are amended to mention only the original broad limitation.

It is considered that the claims 29 and 30 particularly point out and distinctly claim the subject matter which the applicant regards as the invention and that the rejection under 35 U.S.C. 112, second paragraph is overcome.

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Claim Rejection – 35 USC § 102

Claims 18, 22, 24, 25, 29, 30 and 34 are rejected under 35 U.S.C. 102 as being anticipated by "Information Storage Using Supermolecular Surface Pattern" by Cavallini et al., referred to as Cavallini et al. (2003).

However, Cavallini et al. does not anticipate claims 18, 22, 24, 25, 29, 30 and 34 . In fact, it shall be noted that Cavallini et al. (2003) was published in 2003. It shall be also noted that the present application is the U.S. national stage application filed under 35 U.S.C. 371 of PCT/EP03/13594 that validly claims the priority of BO2002A000759 filed on December 4, 2002 (M.P.E.P. 1893.03(c)).

Thus, the priority date of the present application is earlier than the publication date of Cavallini et al. (2003).

Accordingly, it is submitted that the claimed invention was not described in Cavallini et al (2003) before the invention thereof by the applicant.

It is accordingly considered that the subject matter of the claims is novel.

Claim Rejection – 35 USC § 103

It is noted that claim 31 is rejected under 35 USC § 103(a) as being unpatentable over Cavallini et al. (2003) in view of Cavallini et al.(2001), claims 19-21, 23 and 26 are rejected under 35 USC § 103(a) as being unpatentable over Cavallini et al. (2003) in view of Mirkin et al ('979) and claim 28 is rejected under 35 USC § 103(a) as being unpatentable over Cavallini et al. (2003) in view of Michel et al (2001).

As already shown above, Cavallini et al. (2003) was published in 2003 while the present application is the U.S. national stage application filed under 35 U.S.C. 371 of PCT/EP03/13594 that validly claims the priority of BO2002A000759 filed on December 4, 2002.

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It is accordingly submitted that the contents of Cavallini et al (2003) shall not be considered as prior art under the meaning of 35 USC §103.


It is moreover submitted that the claimed subject matter could not have been derived by the skilled person in an obvious manner from the teachings of Cavallini et al.(2001), Mirkin et al ('979) and Michel et al (2001), considered alone or in any combination.

With reference to new claim 37, it shall be noted that it is based on former claim 1 limited to thin films of rotaxanes and catenanes and to external perturbations no more including electric and magnetic perturbations. The present inventors carried out the invention also with the types of external perturbation mentioned in the claim 37 other than mechanic perturbation, obtaining the intended change in the morphology of the thin film, in further experiments similar to those exemplified in the specification, that would also enable the skilled person to carry out such further experiments without undue burden. Further experimental results are available to the inventors and will be submitted if requested.

With regard to new claim 38, it will be noted that it corresponds to former claim 1 limited to this films of rotaxanes and catenanes and to an external perturbation applied with specified types of mechanical perturbations.

In view of the foregoing, favorable action on the merits, including entry and approval of all amendments, reconsideration and withdrawal of each rejection and allowance of all claims is respectfully solicited.

Respectfully submitted,



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